

CLAIMS

1. A pharmaceutical composition comprising:
polyclonal antibodies directed against at least one enteric pathogen; and
a probiotic.
- 5 2. The pharmaceutical composition according to claim 1 wherein the enteric pathogen is selected from the group consisting of: *Aeromonas hydrophilia*, *Bacillus cereus*, *Vibrio parahemolyticus*, *Vibrio cholerae* O1, *Vibrio cholerae* non-O1, *Vibrio vulnificus*, *Salmonella enterica*, *Salmonella typhi*, *Salmonella paratyphi*, *Salmonella enteritidis*, *Salmonella choleraesuis*, *Salmonella typhimurium*,
10 *Clostridium difficile*, *Clostridium botulinum*, *Clostridium perfringens*, *Staphylococcus aureus*, *Escherichia coli* (ETEC, EPEC, EHEC, EaggEC, UPEC and EIEC), *Campylobacter jejuni*, *Campylobacter coli*, *Campylobacter lari*, *Campylobacter fetus*, *Yersinia enterocolitica*, *Yersinia pestis*, *Yersinia pseudotuberculosis*, *Plesiomonas shigelloides*, *Listeria monocytogenes*, enteric
15 viruses, rotavirus, Norwalk-like viruses, enteric adenoviruses, coronavirus and all other non-enveloped enteroviruses, and enteric parasites and fungi, *Cryptosporidium*, and *Cyclospora*.
3. The pharmaceutical composition according to claim 1 wherein the probiotic is selected from the group consisting of: Lactobacilli species,
20 Bifidobacteria species, Saccharomyces species, Enterococci species, Eubacteria species and mixtures thereof.
4. The pharmaceutical composition according to claim 1 wherein the polyclonal antibodies are egg yolk antibodies.
5. The pharmaceutical composition according to claim 1 including an
25 oligosaccharide.
6. The pharmaceutical composition according to claim 1 wherein the pharmaceutical composition is microencapsulated.
7. The pharmaceutical composition according to claim 1 wherein the polyclonal antibodies are raised against more than one antigen derived from the
30 enteric pathogen.
8. A method of preparing a pharmaceutical composition comprising:

admixing a polyclonal antibodies directed against at least one enteric pathogen; and a probiotic.

9. The method according to claim 8 wherein the enteric pathogen is selected from the group consisting of: *Aeromonas hydrophilla*, *Bacillus cereus*,
5 *Vibrio parahemolyticus*, *Vibrio cholerae* O1, *Vibrio cholerae* non-O1, *Vibrio vulnificus*, *Salmonella enterica*, *Salmonella typhi*, *Salmonella paratyphi*, *Salmonella enteritidis*, *Salmonella choleraesuis*, *Salmonella typhimurium*, *Clostridium difficile*, *Clostridium botulinum*, *Clostridium perfringens*, *Staphylococcus aureus*, *Escherichia coli* (ETEC, EPEC, EHEC, EaggEC, UPEC
10 and EIEC), *Campylobacter jejuni*, *Campylobacter coli*, *Campylobacter lari*, *Campylobacter fetus*, *Yersinia enterocolitica*, *Yersinia pestis*, *Yersinia pseudotuberculosis*, *Plesiomonas shigelloides*, *Listeria monocytogenes*, enteric viruses, rotavirus, Norwalk-like viruses, enteric adenoviruses, coronavirus and all other non-enveloped enteroviruses, and enteric parasites and fungi,
15 *Cryptosporidium*, and *Cyclospora*.

10. The method according to claim 8 wherein the probiotic is selected from the group consisting of: *Lactobacilli* species, *Bifidobacteria* species, *Saccharomyces* species, *Enterococci* species, *Eubacteria* species and mixtures thereof.

20 11. The method according to claim 8 wherein the polyclonal antibodies are egg yolk antibodies.

12. The method according to claim 8 including adding an oligosaccharide.

25 13. The method according to claim 8 including microencapsulating the pharmaceutical composition.

14. The method according to claim 8 wherein the polyclonal antibodies are raised against more than one antigen derived from the enteric pathogen.

30 15. A method of treating or preventing a gastrointestinal illness comprising administering to a patient in need thereof an effective dose of a pharmaceutical composition comprising:

polyclonal antibodies directed against at least one enteric pathogen; and

a probiotic.

16. The method according to claim 15 wherein the enteric pathogen is selected from the group consisting of: *Aeromonas hydrophilia*, *Bacillus cereus*, *Vibrio parahaemolyticus*, *Vibrio cholerae* O1, *Vibrio cholerae* non-O1, *Vibrio*
5 *vulnificus*, *Salmonella enterica*, *Salmonella typhi*, *Salmonella paratyphi*,
Salmonella enteritidis, *Salmonella choleraesuis*, *Salmonella typhimurium*,
Clostridium difficile, *Clostridium botulinum*, *Clostridium perfringens*,
Staphylococcus aureus, *Escherichia coli* (ETEC, EPEC, EHEC, EaggEC, UPEC
and EIEC), *Campylobacter jejuni*, *Campylobacter coli*, *Campylobacter lari*,
10 *Campylobacter fetus*, *Yersinia enterocolitica*, *Yersinia pestis*, *Yersinia*
pseudotuberculosis, *Plesiomonas shigelloides*, *Listeria monocytogenes*, enteric
viruses, rotavirus, Norwalk-like viruses, enteric adenoviruses, coronavirus and all
other non-enveloped enteroviruses, and enteric parasites and fungi,
Cryptosporidium, and *Cyclospora*.

15 17. The method according to claim 15 wherein the probiotic is selected
from the group consisting of: *Lactobacilli* species, *Bifidobacteria* species,
Saccharomyces species, *Enterococci* species, *Eubacteria* species and mixtures
thereof.

20 18. The method according to claim 15 wherein the polyclonal antibodies
are egg yolk antibodies.

19. The method according to claim 15 wherein the pharmaceutical
composition includes an oligosaccharide.

20. The method according to claim 15 wherein the pharmaceutical
composition is microencapsulated.

25 21. The method according to claim 15 wherein the polyclonal antibodies
are raised against more than one antigen derived from the enteric pathogen.